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# Contents

**Notes**

# Safety Instructions

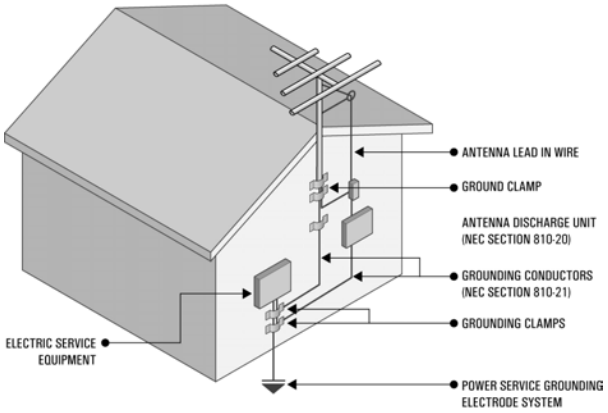
1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Use only attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as the power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

**Note to HDTV monitor installer**: This reminder is provided to call the satellite TV system installer's attention to Article 820-40 of the *National Electrical Code* (NEC) that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

Example of Antenna Groudning as per (NEC) National Electrical Code




### Safety Tips

- Unplug the monitor from the AC power outlet *before* cleaning.
- The use of accessories or attachments not recommended by the monitor manufacturer will void the *Limited Warranty.*
- Do *not* place the monitor in an enclosure such as a cabinet without proper ventilation.
- Do *not* stack the monitor on top of or below other electronic devices.
- Operate the monitor using *only* the type of power source indicated on the marking label. Unplug the monitor power cord by gripping the power plug, *not* the cord.
- Do *not* overload wall outlets or extension cords, as this can result in a risk of fire or electrical shock.
- *Never* insert objects of any kind into the monitor through openings, as the objects may touch dangerous voltage points or short out parts. This could cause fire or electrical shock.
- *Make sure* that the outdoor parts of the antenna system are grounded in accordance with local, state, federal, and *National Electrical Code* (NEC) requirements.
- Do *not* locate the antenna near overhead light or power circuits, or where it can fall into such power lines or circuits. When installing the antenna, take *extreme* care to avoid touching such power lines or circuits, as contact with them can be *fatal*.
- Do *not* attempt to service the monitor yourself, as opening or removing covers may expose you to dangerous voltage, and will void the *Limited Warranty.* Refer all servicing to authorized service personnel.
- Use an outlet that contains surge suppression or ground fault protection. For added protection during a lightning storm, or when the monitor is left unattended and unused for long periods of time, unplug the power cord from the wall outlet and disconnect the lines between the monitor and the antenna. This will provide some protection against damage caused by lightning or power line surges.

# Chapter 1

# Introduction

Welcome to DISH Network HDTV. This High Definition TV (HDTV) monitor will bring you the sharpest picture format available. Along with HDTV programming delivered by DISH Network, you will also be able to enhance your home entertainment system with this versatile monitor.

## Key Features

Your monitor is equipped with features that will add to your TV-viewing experience. These features include the following:

### Dish Digital Visual Interface (DISH DVI)

Use the DISH DVI input to connect a DISH DVI-equipped DISH Network HDTV satellite receiver. This connection provides the highest quality digital signal available for HD programming.

### Unified Remote Control

The remote control provided with your DISH DVI-equipped DISH Network receiver seamlessly controls both your DISH Network HDTV monitor and satellite receiver. To program the remote to control other devices, see the satellite TV receiver User's Guide.

## How to Use This Guide

### Tips

In the margins of pages throughout this guide are tips and other information to make using your HDTV monitor easier.

### Conventions

To make it easy for you to use this guide, we use the following conventions.

- The names of remote control buttons and modes are in all capital letters. Example: Press the SAT button.
- Menus and options that appear on the monitor's screen are in bold type. Example: Open the **Main Menu**.
- Connections on the back of the monitor and receiver are in small capital letters.
  Example: **DISH DVI**.

## If You Run Into Problems

There are problems you might run into that are easy to solve. Before you call the Customer Service Center, be sure to refer to *Chapter 5, Troubleshooting*. If problems remain call the Customer Service Center at 1-800-333-DISH (3474).

**Tip: Save your purchase receipt for the monitor. See the Limited Warranty on page 43 for details.**

**Notes**

# Chapter 2

# Monitor Description

## Monitor Front Panel

### Front Panel Controls

You can use the front panel buttons to operate many of the monitor's features.

#### Menu/OK

Displays the **Main Menu**. In the menu system, it selects highlighted items.

#### Channel Controls

Changes channels and inputs in the monitor's current channel list. In the menu system, use the CHANNEL CONTROLS to move through the menus and adjust menu controls.

**Note**: Normally, you would want to change programming channels using the DISH Network satellite receiver and its Electronic Program Guide.

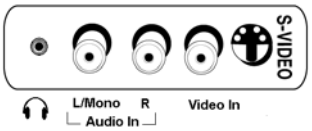
#### Volume Controls

Turns the volume up or down. In the menu system, use the VOLUME CONTROLS to move through the menus and adjust menu controls.

#### Power

Turns the monitor on and off.

## Front Panel Connections




The monitor has front panel connections for convenience: one set of audio/video inputs, an S-video input, and a headphone jack.

**Note**: These connections may be on the side of the monitor.

### Headphones

Connect headphones to listen to the sound coming from the monitor. For instructions on how to adjust the headphone audio settings, see page 9.

### L/Mono and R Audio In

The **L/MONO** (white) and **R** (red) connectors receive audio from another device such as a VCR, camcorder, or video game console.

### Video In

The **VIDEO IN** (yellow) connector receives video from another device such as a VCR, camcorder, or video game console. For information on how to display video from this input, see page 9.

### S-Video

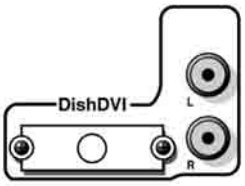
The **S-VIDEO** receives video from another device. Make sure you also connect audio cables from the device to the monitor's RCA-type audio connectors. For information on how to display video from this input, see page 9.

**Note**: Do not try to use the **S-VIDEO** and **VIDEO IN** at the same time because the two signals interfere with each other.

**Tip: Remember to connect the left and right audio cables because the DISH DVI cable carries the picture signal, not the sound.**

# Monitor Back Panel

## DISH DVI Input

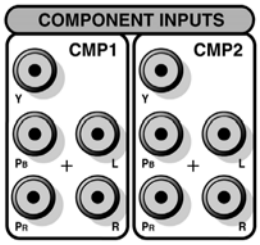



Connect an activated DISH DVI-equipped DISH Network HD receiver to watch high definition programming. For information on how to display video from this input, see page 9.

- **DISH DVI** - Provides a high-quality digital video interface.
- **L/MONO** and **R** (RCA-type audio) - Provides left (white) and right (red) audio connections when using the **DISH DVI** video input.

## Component Inputs

Connect a component video source, such as a DVD player, to **CMP1** or **CMP2**. For information on how to display video from this input, see page 9.

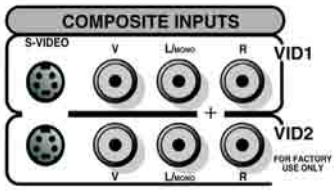



- **Y-$P_B$-$P_R$** (Component Video) - Provides optimum picture quality because the video is separated into three signals: **Y** (green), **$P_B$** (blue), and **$P_R$** (red).

- **L/MONO** and **R** (RCA-type audio) - Provides left (white) and right (red) audio connections when using **COMPONENT INPUTS**.

## Composite Inputs

Connect another device, such as a VCR or DVD player, to **VID1** or **VID2**. For information on how to display video from this input, see page 9.




- **S-VIDEO** - Provides better picture quality than the RCA-Type Video (yellow) connections because the color part of the signal is separated from the brightness part of the picture.

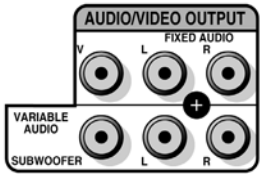
- **V** (RCA-Type Video) - The yellow input provides video connection.

  **Note**: Do not try to use the **S-VIDEO** and **VIDEO IN** at the same time because the two signals interfere with each other.

- **L/MONO** and **R** (RCA-type audio) - Provides left (white) and right (red) audio connections when using either composite video connection above.

## Audio/Video Outputs

Connect an amplifier, audio receiver, or external video monitor.




- **FIXED AUDIO L/R** - Provides fixed-level audio output from the monitor. This audio output is ideal for connecting to an audio/video (A/V) receiver when you want to control the volume through the A/V receiver.

- **VARIABLE AUDIO L/R** - Provides variable-level audio output. Volume levels are controlled by the volume controls on the monitor and remote control.

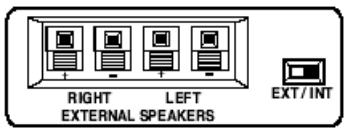
- **V** (RCA-Type Video) - Provides composite video connection.

**Note**: This video output does not include menu overlays or messages.

- **SUBWOOFER** - Provides non-amplified lower bass audio signals to a subwoofer.

  **Note**: If you have connected a subwoofer, make sure you set the **Subwoofer** option in the **Sound Menu** to **External**. See page 14 for instructions.

## External Speakers (Optional)




- **RIGHT** and **LEFT EXTERNAL SPEAKERS** - Provides amplified stereo signals to external left and right speakers.

  **Note**: Connected speakers should be 8 ohms with 10 watts maximum power rating per speaker.

  **Note**: External speakers must be purchased separately.

- EXT/INT (switch) - Lets you turn the monitor's internal speakers on or off. EXT sends audio to external speakers only. INT sends audio to the monitor's internal speakers only.

## Wired IR

This jack is for connecting a wired remote control system, which is primarily for professional installers. If you're using the remote that was included with your TV, don't plug anything into this jack.

## Antenna/Cable (Capped)

Connect an antenna to receive the signal from an off-air antenna.

**Note**: For the best viewing experience, you should use the off-air tuner provided in your DISH DVI-equipped DISH Network satellite receiver. The satellite receiver's off-air tuner can receive both analog and digital off-air broadcasts, integrates off-air programming into its Electronic Program Guide, and allows all of the satellite and off-air programming to be viewed over a single high-quality digital connection.

## Using the Remote Control

The remote control gives you easy access to the features of your monitor. This remote control is provided with your DISH DVI-equipped DISH Network satellite receiver.

**Note**: Your remote control may look a little different than that shown.

## Remote Control Buttons

The following section describes how to use the remote control with your monitor.

### Mode Buttons

**Tip: Normally, you would want to use the remote control in SAT mode to watch DISH Network programming and to use the extensive features of your DISH Network satellite receiver.**

The mode buttons on your remote control allow you to control your monitor, DISH Network satellite receiver, and other devices.

- Press the SAT mode button to turn on the monitor and DISH Network satellite receiver, and change the monitor to the DISH DVI input so you can watch satellite programming.

  This action also puts the remote control into the SAT mode, enabling it to control the satellite receiver. Refer to your satellite receiver User's Guide for how to control your satellite receiver.

- Press the TV mode button to control the monitor. See the section below for details on monitor controls.

- Press the VCR and AUX mode buttons to control other devices. See page 31 for instructions on autotuning the monitor to display from these devices when these mode buttons are pressed.

  See the User's Guide that came with your DISH Network satellite receiver for instructions on using the mode buttons to program the remote to control other devices.

### TV Mode Button

Pressing the TV mode button puts the remote control in the TV mode. When in the TV mode, the other buttons work as described below to control monitor features.

**Note**: Your remote control provided with your DISH DVI-equipped DISH Network satellite receiver comes from the factory ready to work with your DISH Network HDTV monitor. However, the TV mode button can be programmed to operate other TVs. If the remote control has been programmed to operate a different TV and you wish to restore the remote control factory settings to control your DISH Network HDTV monitor, see *Restoring Your Remote Control's Factory Settings for Monitor Control* on page 38.

## Power Buttons

Press the POWER or TV POWER button to turn the monitor ON or OFF. The TV POWER button will also turn the monitor ON or OFF in other remote control modes.

**Tip: Remember to keep the remote control in TV mode to use these buttons.**

## SD/HD Input Button

Press the SD/HD INPUT button to cycle through the inputs that are to be displayed (**DISH DVI**, **VID1**, **VID2**, **FRNT**, **CMP1**, and **CMP2**).

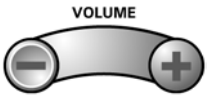
## Menu Button

Press the MENU button to open the **Main Menu**.

## Mute Button

Press the MUTE button to turn off the monitor sound. Press it again to restore the monitor sound. The MUTE button will also mute and restore the monitor volume in other remote control modes.

## Volume Button




Press the minus (-) side of the VOLUME button to lower the monitor volume. Press the plus (+) side of the VOLUME button to raise the monitor volume. The VOLUME button will also change the monitor volume in other remote control modes.

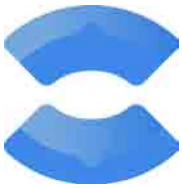
Use the VOLUME button to adjust the headphone volume settings:

1. Press the remote control VOLUME button to open the **Volume Level** display.
2. Press the UP or DOWN ARROW button to display the **Headphone Volume** display.
3. Press the LEFT AND RIGHT ARROWS button to adjust the headphone volume.

## Guide Button

Press the GUIDE button to open the **Channel Guide** menu. See page 19 for how to use the **Channel Guide**.

## Up and Down Arrow Buttons



Press the UP and DOWN ARROW buttons to:

- Move up and down in a menu or adjust a monitor control.
- Move the Picture-In-Picture (PIP) window around the screen in PIP mode. See page 13 for information about PIP.
- Moves the picture up or down on the screen when in some Zoom modes described below.

## Left and Right Arrow Buttons

Press the LEFT and RIGHT ARROW buttons to:

- Point to different items in the monitor menus and to adjust menu controls.
- Change the current format of the screen (**4:3**, **Zoom 14:9**, **Zoom 16:9**, **Zoom 16:9 ▲▼**, **Cinerama**, **Regular Mode 16:9**).
- Switch the two Picture-Outside-Picture (POP) windows when no menus are on the screen.

## Page Up and Page Down Buttons

Press the PAGE UP and PAGE DOWN buttons to change the channel up or down on the monitor's internal off-air tuner.

**Note**: For the best viewing experience, you should use the off-air tuner provided in your DISH DVI-equipped DISH Network satellite receiver. The satellite receiver's off-air tuner can receive both analog and digital off-air broadcasts, integrates off-air programming into its Electronic Program Guide, and allows all of the satellite and off-air programming to be viewed over a single high-quality digital connection.

## Recall Button

Press the RECALL button to go back to the last input or channel you watched. Press it again to switch between the last two inputs/channels you watched.

## Select/OK Button

Press the SELECT/OK button to:

- Select the option you highlight in a menu.
- Freeze the picture when using **VID1**, **VID2**, **FRNT**, or the monitor's off-air tuner channels. To unfreeze, press any key.

Do not use the Freeze feature for an extended period of time. This can cause the image to be permanently imprinted on the picture tube (or projection TV picture tubes). Such damage is not covered by your warranty. Press any button to unfreeze the picture at any time.

**Note**: When you unfreeze the picture, you will go back to live programming.

## Info Button

Press the INFO button to show the **Input Banner**. Press the button again to clear the screen. The **Input Banner** is described on page 33.

## Cancel Button

Press the CANCEL button to remove any menu or display from the screen and return to normal viewing.

## Pound (#) Button

Press the POUND (#) button to open the **Sound and Picture Presets** menu. The **Presets** menu is described on page 18.

## Star (*) Button

Press the STAR (*) button to set the **Sleep Timer** to turn off the TV after a given amount of time.

**Tip: Remember to keep the remote control in TV mode to use these buttons.**

**Tip: PIP lets you watch two channels at one time - one channel on the main screen and the other in a smaller window. POP also lets you watch two channels at one time - one channel on the left side of the screen (main picture) and the other on the right.**

## PIP Button

Press this button to open the Picture-In-Picture (PIP) window. Press the button a second time to open the Picture-Outside-Picture (POP) window. When you press the PIP button a third time, the POP window will close. Press the CANCEL button at any time to close the PIP or POP window. See page 13 for more details on PIP and POP.

**Note**: PIP through the monitor is not supported on **DISH DVI**, **CMP1**, and **CMP2**. However, your DISH DVI-equipped DISH Network receiver may have PIP capabilities which will allow PIP on the **DISH DVI** input. See your *User's Guide* for your satellite receiver.

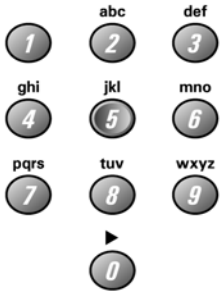
## Swap Button

Press this button to swap the video in the main display with the video in the PIP or POP window.

## Position Button

Press this button to move the PIP window to different positions on the monitor screen.

## Number Pad Buttons




Use the NUMBER PAD buttons to enter a channel number to change the channel.

To enter a one-digit channel, enter a zero first. To enter a two-digit number, enter the two digits. To enter a three-digit number, press and hold the 1 button until **1--** displays, then add the second and third digits (for example, to tune to channel 123, press and hold 1 until **1--** displays, release the 1 button, and then press 2 and 3).

**Note**: For the best off-air viewing experience, you should use the off-air tuner provided in your DISH DVI-equipped DISH Network satellite receiver. The satellite receiver's off-air tuner can receive both analog and digital off-air broadcasts, integrates off-air programming into its Electronic Program Guide, and allows all of the satellite and off-air programming to be viewed over a single high-quality digital connection.

# Chapter 3

# Using the Monitor's Features

## One-Touch Satellite Viewing

Once your HDTV monitor and DISH Network satellite TV receiver are connected with a **DISH DVI** cable, press the SAT button and the monitor and satellite receiver will begin displaying satellite programming. After the monitor is on, pressing the SAT button will always switch the display to satellite programming.

## PIP and POP

The PIP feature lets you display a second, smaller picture on top of the main picture. The POP feature lets you display two windows side by side. The main picture is on the left and the POP window is on the right.

**PIP Example**

**POP Example**

There are several remote buttons that control the way the PIP window works:

- PIP - Press this button to open the PIP window. Press the button a second time to open the POP window. When you press the PIP button a third time, the POP window will close. Press the CANCEL button at any time to close the PIP or POP window. See *PIP Menu* on page 27.

  **Note**: When in POP, the picture on the left is the one that remains when you close the POP window.

- POSITION - Press this button to move the PIP window to different positions on the monitor screen.

  **Note**: The UP and DOWN ARROW buttons also move the PIP window.

- SWAP - Press this button to swap the video in the main display with the video in the PIP or POP window.

  **Note**: The LEFT and RIGHT ARROW buttons also swap windows in POP mode.

**Tip: PIP and POP are only available on the VID1, VID2, FRNT, and monitor internal off-air tuner inputs. DISH DVI, CMP1, and CMP2 do not display PIP and POP windows.**

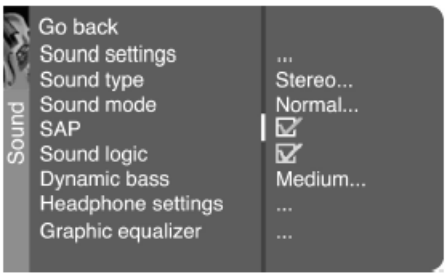
**Tip: Remember to keep the remote control in TV mode to use these buttons.**

## Main Menu

When you press the MENU button on the remote control, the **Main Menu** displays. Use the **Main Menu** to get to the menus described below which allow you to customize settings on your monitor.

## Sound Menu

The **Sound** menu allows you to customize the sound settings on your HDTV monitor. To open the **Sound** menu, press MENU and then select **Sound**.




### Sound Settings

Press the LEFT or RIGHT ARROW to display a choice list that lets you adjust the monitor's speakers and subwoofer.

**Tip: Remember to keep the remote control in TV mode to use these buttons.**

- **Left and Right Balance** - Use the LEFT and RIGHT ARROWS to adjust the volume level balance between the left and right speakers.
- **Amplifier** - Use the LEFT and RIGHT ARROWS to select **External** (if your TV is using external amplifier only) or **Internal** (if your TV is using the speakers in the TV).
- **Subwoofer** - Set the subwoofer to **External** if the TV is connected to an external subwoofer; or **None** if the TV is not connected to an external subwoofer.

## Sound Type

Press the LEFT and RIGHT ARROWS to scroll through the available audio types, which control the way the sound comes through your speakers.

- **Mono** (available only when using **ANTENNA/CABLE** input)- Plays the sound in mono only. Use this setting when receiving broadcasts with weak stereo signals.
- **Stereo** - Splits the incoming stereo audio signal into left and right channels. Most TV programs and recorded materials have stereo audio. The word Stereo appears in the channel banner when you tune to a program that is broadcast in stereo.
- **Automatic** (available only when using **ANTENNA/CABLE** input) - Chooses the sound type according to the current signal.
- **Left and Right** (available for audio/video inputs only) - Isolates either the left or right channel of the incoming audio.

**Tip: Remember to keep the remote control in TV mode to use these buttons.**

## Sound Mode

Press the LEFT and RIGHT ARROWS to scroll through available sound modes to enhance your audio experience.

- **Normal** - Does not perform any special processing, simply provides mono or stereo sound.
- **Wide** (available only when using **ANTENNA/CABLE** input)- Available only for mono signals. “Widens” sound from mono broadcasts and mono components connected to your TV for a fuller, more spacious sound.
- **Magic** - Available only for stereo signals. Gives a surround effect with more bass.

## Second Audio Program (SAP)

Press the LEFT and RIGHT ARROWS to determine whether the program’s audio should be played in a second language, if one is available.

The TV displays **SAP** when you tune to a program that is broadcast with SAP information (not all channels have SAP information). SAP audio is broadcast in mono. SAP is also used to broadcast a program’s audio with descriptions of the video for the visually impaired.

**Note**: SAP is available only when using **ANTENNA/CABLE** input.

**Note**: Your DISH Network satellite receiver includes secondary audio capabilities. See the User’s Guide that came with your satellite receiver for details.

## Sound Logic

Reduces the annoying blasts in volume during commercial breaks, and also amplifies softer sounds in program material. Eliminates the need to constantly adjust the volume.

## Dynamic Bass

**Tip: Remember to keep the remote control in TV mode to use these buttons.**

Enhances your TV's low-frequency response. The options are **Off**, **Medium** and **High**.

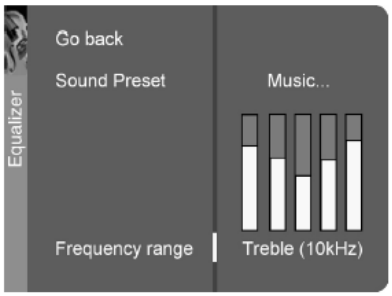
## Headphone Settings

**Tip: See page 9 for an easy way to adjust the headphone volume.**

Press the LEFT and RIGHT ARROWS to pick among the following adjustable headphone settings: **Volume**, **Bass** and **Treble**. The **Headphone** sound option allows you to choose **Stereo**, **Mono** or **Automatic**. These descriptions are same as **sound type** above.

**Note**: **Mono** and **Automatic** are available only when using **ANTENNA/CABLE** input.

## Graphic Equalizer



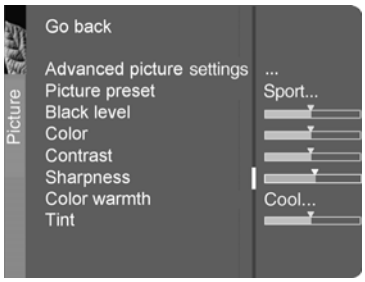

The **Graphic Equalizer** allows you to choose a specific setting through the **Sound Preset** option. Press the LEFT and RIGHT ARROWS to cycle through the options: **Standard**, **Movie**, **Voice**, **Music**, **Flat**, **Videogame**, **Video Camera**, and **Personal**.

The **Frequency range** displays the different treble and bass bands set for each **Sound Preset** option. You can choose a band and make adjustments. When you make adjustments, the **Sound Preset** option automatically changes to **Personal**. Press the LEFT and RIGHT ARROWS button to select the frequency (**Bass 100Hz**, **Mid Bass 500Hz**, **Medium 1.5kHz**, **Mid Treble 5kHz**, **Treble 10kHz**) you want to adjust. Then use the UP or DOWN ARROW button to adjust the decibel.

To view the **Frequency range** of another **Sound Preset** option, press the LEFT and RIGHT ARROWS until no band is selected and **Frequency range** is highlighted. Then press the UP or DOWN ARROW to highlight **Sound Preset**.

# Picture Menu

The **Picture** menu options apply to the video for the main TV and video input selections. To open the **Picture Menu**, press MENU and then select **Picture**.




## Advanced Picture Settings

Press the LEFT and RIGHT ARROWS to select among the following **Advance Picture Settings**:

- **Contrast Expand** - You can adjust the contrast of the picture to suit the light of the room. Press the right arrow to choose which of the following best describes the lighting in the room: **Low**, **Medium** or **High**.
- **Picture Rotation** (available only on the direct view HD34-310) - The TV has an extra large picture tube that makes it vulnerable to the effects of the Earth's magnetic field. Press the DOWN ARROW to highlight **Picture Rotation**, then press the LEFT or RIGHT ARROW to adjust the picture rotation.
- **Scan Velocity Modulation** - Improves the sharpness of the picture by changing the speed of the cathode-ray tube's electron beam when it transitions between dark and light areas of the screen. Choose to have it on (box checked) or off (box unchecked), depending on your preference using the SELECT/OK button.
- **Autoformat** (not available on **DISH DVI** input)- When enabled (box checked) the TV automatically detects the screen format the signal is sending for each channel, as well as input channels using the SELECT/OK button.
- **Video Noise Reduction** (not available on **DISH DVI** input) - Reduce picture "static" or any type of interference. This feature is especially useful for providing a clearer picture in weak analog signal conditions. Press the RIGHT ARROW to choose between:

**Off** for no noise reduction; **Minimum** for a softer, smoother picture that retains picture sharpness and detail; **Medium** for a slightly softer picture than the Minimum setting; **Maximum** for an even softer, smoother picture than the other settings (the picture detail is somewhat decreased).

- **Optimized Still Picture** (not available on **DISH DVI**)- When enabled (box checked), enhances the picture specifically for still frames (for example, if you're watching a slide show on your HDTV monitor, or if you've paused a frame of a DVD).

- **Auto Skin Tone** - When enabled (box checked), minimizes the flesh tone variations of the TV picture.

- **Film Mode** (not available on **DISH DVI**)- Automatically detects video sources that were originally recorded on film (like most movies) and subsequently converted to a different format (for TV broadcast, for example). Film mode processes the converted signal so that it looks as close as possible to the original. Another name for this process is *reverse 3:2 pulldown*.

  - **Advanced** (recommended) enables the feature only when the TV detects that movie playback quality could be improved. Advanced is the default setting.
  - The **On** setting should only be used in rare circumstances when the TV is used solely with film-based sources (like DVDs on a non-progressive scan player).
  - The **Off** setting turns off film mode up conversion. Try using this setting if you think the reverse 3:2 pulldown is causing distortions in your picture).

- **Horizontal Position** - This option allows you to change the horizontal position of the picture on a 1080i source.

## Picture Presets

Press the LEFT and RIGHT ARROWS to select one of the preset picture settings:

**Tip: Remember to keep the remote control in TV mode to use these buttons.**

- Displays a choice list that lets you select one of the preset picture settings: **Vibrant**, **Cinematic**, **Natural**, **Sports**, **Videogame**, **Video Camera**, or **Personal**. Choose the setting that is best for your viewing environment. You can set a different picture preset for each input (including one for your regular TV channels).

When you change any of these picture settings, the **Picture Preset** changes to **Personal**. Use the LEFT and RIGHT ARROWS button to make adjustments. To return to the **Picture** menu, press the UP or DOWN ARROW button.

### Black Level

Press the LEFT and RIGHT ARROWS to adjust the brightness of the picture.

### Color

Press the LEFT and RIGHT ARROWS to adjust the richness of the color.

### Contrast

Press the LEFT and RIGHT ARROWS to adjust the difference between the light and dark areas of the picture.

### Sharpness

Press the LEFT and RIGHT ARROWS to adjust the crispness of the edges in the picture.

**Tip: You can adjust sharpness for each channel. This is useful if the video appears fuzzy.**

### Color Warmth

Press the LEFT and RIGHT ARROWS to set one of three automatic color adjustments:

- **Cool** - For a more blue palette of picture colors.
- **Normal**
- **Warm** - For a more red palette of picture colors. The warm setting corresponds to the NTSC standard of 6500 K.

### Tint

Press the LEFT and RIGHT ARROWS to adjust the balance between the red and green levels.

**Note**: Tint not available for **DISH DVI**, **CMP1**, and **CMP2** inputs.

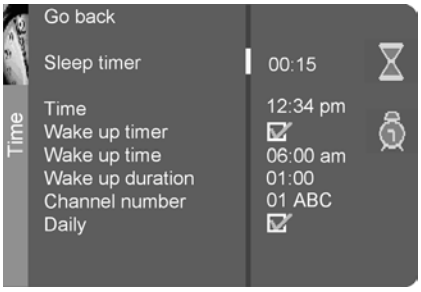
## Channel Guide Menu

The **Channel Guide** menu allows you to view and select from the entire list of inputs and channels and their labels. To open the Channel Guide menu, either press GUIDE or press MENU and then select **Channel Guide**. Use the UP or DOWN ARROW to scroll through the list. Press SELECT/OK to pick an input or monitor tuner channel.

**Note**: For best viewing experience, use the Electronic Program Guide on your satellite receiver to see what programs are on and to change channels. See the *User's Guide* that came with your satellite receiver for more information.

## Time Menu

The **Time Menu** allows you to set up the monitor to turn itself on or off using **Sleep** and **Wake** timers. To open the **Time Menu**, press MENU, and then select **Time**.




- **Sleep Timer** - Use the LEFT and RIGHT ARROWS to set the TV to turn off after a given time. You can also press the STAR (*) button on the remote control to open this screen.
- **Time** - Use the NUMBER PAD buttons to enter the current time. If it is eight o'clock, for example, you must first enter the number zero, then number eight. Use the SELECT/OK button to choose between AM and PM.
- **Wake up timer** - Lets you set the TV to turn itself on. When you press SELECT to turn on **Wake up timer**, the following options appear:
  - **Wake up time** - Use the NUMBER PAD buttons to set the time you want the TV to turn itself on. Use the SELECT/OK button to choose between AM and PM.
  - **Wake up duration** - Use the LEFT and RIGHT ARROWS to set how long you want the TV to stay on when it turns on.
  - **Channel number** - Use the LEFT and RIGHT ARROWS to select a specific channel the TV tunes to when the wake up timer is set.
  - **Daily** - Use the SELECT/OK button to choose if you want the wake up timer to turn on daily.

**Tip: The Wake Up Timer only works when the time is set correctly on the TV.**

# Parental Control

The choices in the US V-CHIP and Canada V-CHIP menus involve software inside your TV (referred to as V-Chip) which allows you to block TV programs and movies based on violence, sex, or other content you may believe children should not view. Once you block programs, you can unblock programs by entering a password. By default, the software inside your TV is turned "off." For instructions to turn on V-Chip, see the following instructions.

**Note**: Parental Control settings are not available for **DISH DVI**, **CMP1**, or **CMP2** inputs.

## How V-Chip Works in USA and Canada

V-Chip reads the program's age-based rating (TV-MA, TV-14, etc.) and content themes [(Violence (V), Adult Language (L), etc.)]. If you have blocked the rating and/or content themes that the program contains, you will receive the message: *This channel has not been approved for viewing. Change channel or press SELECT/OK to enter password and temporarily deactivate the Parental Control*.

Broadcasters are not required to provide content themes, so programs received without content themes will only be blocked if you block their age-based rating. You can also block out programs that have been given an **Exempt Rating**, and programs that are considered **Unrated**. The next several pages have tables showing the TV age-based ratings and content themes for the US and Canada.

## USA V-Chip

### US V-Chip TV Rating Limit

The V-Chip TV Rating Limit lets you decide which TV programs can and cannot be viewed. To set TV programming limits:

1. Choose **Parental Control** from the **Main Menu**. If **Parental Controls** have previously been locked, you must enter your password.
2. Select **US V-Chip**. Then select **V-Chip TV Rating**.
3. Once you get to the **V-Chip TV Rating Limit** screen, use the ARROW buttons and SELECT/OK on your remote to change the status of a TV program rating or content theme from **View** to **Block**.
4. For TV rating limits to take effect, lock **Parental Controls** by accessing the **Lock Parental Controls** menu.

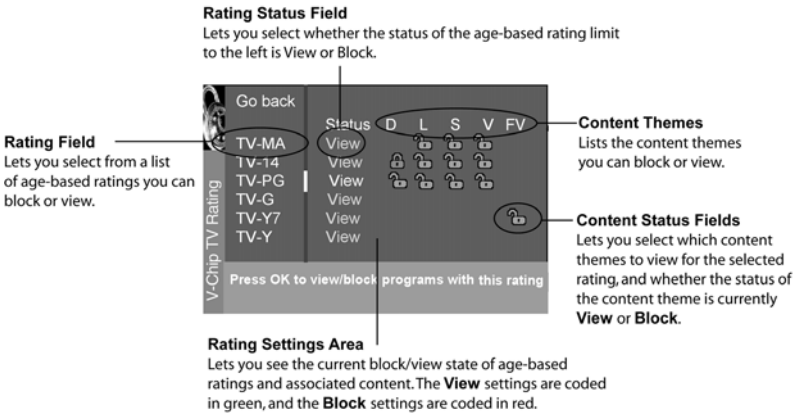
The following sections give you more details about how to change the status of TV program limits.

**Note**: If you forget your password, follow step one above to get to the password entry screen. Then press the VOL+ and CH+ buttons on the TV's front panel at the same time for at least 8 seconds. You will receive an on-screen message that **Parental Controls** have been unlocked once you've successfully reset the password.

**Tip: Remember to keep the remote control in TV mode to use these buttons.**

## The V-Chip Rating Screen

The following is an example of where items are located within the **Rating Limit** screen.


Rating Status Field
Lets you select whether the status of the age-based rating limit to the left is View or Block.
Go back
Status
D L S V FV
Rating Field
Lets you select from a list of age-based ratings you can block or view.
TV-MA
TV-14
TV-PG
TV-G
TV-Y7
TV-Y
View
View
View
View
View
View
V-Chip TV Rating
Press OK to view/block programs with this rating
Content Themes
Lists the content themes you can block or view.
Content Status Fields
Lets you select which content themes to view for the selected rating, and whether the status of the content theme is currently View or Block.
Rating Settings Area
Lets you see the current block/view state of age-based ratings and associated content. The View settings are coded in green, and the Block settings are coded in red.

| Rating | Description and Content Themes for Age-Based Ratings |
|---|---|
| **TV-MA** | **Mature Audience Only** - Specifically designed to be viewed by adults and may be unsuitable for children under 17. It contains one or more of the following content themes: crude indecent language (L), explicit sexual activity (S), or graphic violence (V). |
| **TV-14** | **Parents Strongly Cautioned** - Contains some material that many parents would find unsuitable for children under 14. Parents are strongly urged to exercise greater care in monitoring this program and are cautioned against letting children under the age of 14 watch unattended. This program contains one or more of the following content themes: intensely suggestive dialogue (D), strong coarse language (L), intense sexual situations (S), or intense violence (V). |
| **TV-PG** | **Parental Guidance Suggested** - Contains material that parents may find unsuitable for younger children. Many parents may want to watch it with their younger children. The program contains one or more of the following content themes: some suggestive dialogue (D), infrequent coarse language (L), some sexual situations (S), or moderate violence (V). |
| **TV-G** | **General Audience** - Most parents would find this program suitable for all ages. It contains little or no sexual dialogue (D) or situations (S), no strong language (L), and little or no violence (V). |
| **TV-Y7** | **Directed to Children 7 Years and Older** - Designed for children ages 7 and above. It may be more appropriate for children who have acquired the developmental skills needed to distinguish between make-believe and reality. Themes and elements in this program may include mild fantasy violence (FV) or comedic violence, or may frighten children under the age of 7. |
| **TV-Y** | **All Children** - Themes and elements in this program are designed for a young audience, including children from ages 2-6. It is not expected to frighten younger children. |

| Content Themes | |
|---|---|
| **D** | Sexually explicit dialogue |
| **L** | Adult language |
| **S** | Sexual situations |
| **V** | Violence |
| **FV** | Fantasy Violence |

## Blocking Age-Based Ratings

You can automatically block all program ratings above a specified age-based rating level. To block programs with higher ratings:

1. Press the UP or DOWN ARROW button to scroll to the rating corresponding with the lowest rating you do not want the child to view.
2. Press the SELECT/OK button to toggle between **View** and **Block**. The status for the rating listed to the left and all higher ratings automatically changes to **Block**.
3. Select **Go back**.
4. Select **Lock Parental Controls** from the **Parental Control** menu for rating limits to take effect.
5. Select **Go Back** to exit this screen.
6. For **TV rating limits** to take effect, lock **Parental Controls** by accessing the **Lock parental controls** menu.

**Note**: Broadcasters are not required to provide content themes or age-based ratings.

**Tip: Remember to keep the remote control in TV mode to use these buttons.**

## Blocking Specific Content Themes

You can block programs based on their content. (Content is represented by the **D**, **L**, **S**, **V** and FV on your screen.) When you block a content theme for a particular rating, you automatically block that content theme for higher rated programs as well. To block program content:

1. Determine the content themes you want to block.
2. Press the DOWN ARROW button to scroll to the rating whose content theme you want to change.
3. Press the RIGHT ARROW button to move the yellow highlight to a particular content theme status.
4. Press the SELECT/OK button to change its status.

**Note**: Broadcasters are not required to provide content themes or age-based ratings.

**Note**: You must remember to lock Parental Controls for rating limits to take effect.

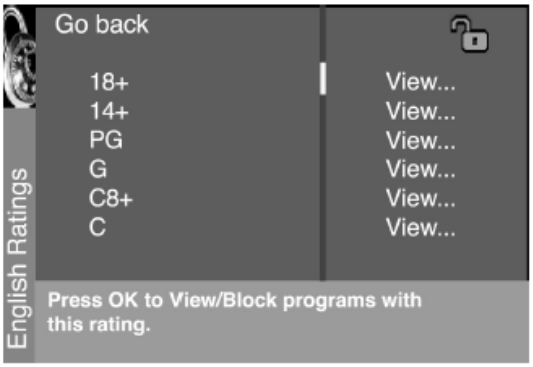
## Canada V-Chip TV Rating Limit

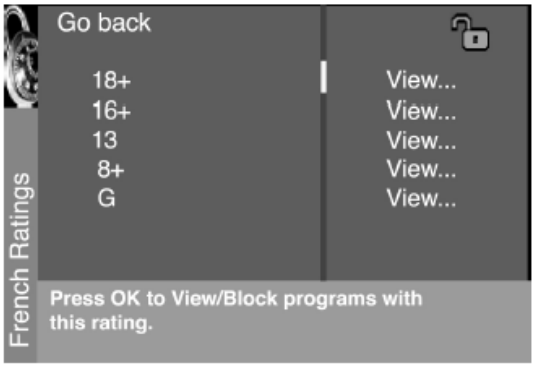
Canadian TV V-Chip supports two different Canadian rating systems: **English** and **French**.

| Rating | Canadian English Description and Content Themes for Age-Based Ratings |
|---|---|
| **18+** | **Adults**. Programming intended for adults 18 and older. It may contain elements of violence, language, and sexual content which could make it unsuitable for viewers under 18. Violence Guidelines: May contain violence integral to the development of the plot, character or theme, intended for adult audiences. Other Content Guidelines: May contain graphic language and explicit portrayals of nudity and/or sex. |
| **14+** | **Viewers 14 and over**. Programming contains themes or content which may not be suitable for viewers under the age of 14. Parents are strongly cautioned to exercise discretion in permitting viewing by preteens and early teens. Violence Guidelines: May contain intense scenes of violence. Could deal with mature themes and societal issues in a realistic fashion. Other Content Guidelines: May contain scenes of nudity and/or sexual activity. There could be frequent use of profanity. |
| **PG** | **Parental Guidance**. Programming intended for a general audience but which may not be suitable for younger children (under the age of 8). Parents may consider some content inappropriate for unsupervised viewing by children aged 8-13. Violence Guidelines: Depictions of conflict and/or aggression will be limited and moderate; may include physical, fantasy, or supernatural violence. Other Content Guidelines: May contain infrequent mild profanity, or mildly suggestive language. Could also contain brief scenes of nudity. |
| **G** | **General Audience**. Programming considered acceptable for all ages groups. While not designed specifically for children, it is understood younger viewers may be part of the audience. Violence Guidelines: Will contain very little violence, either physical or verbal or emotional. Will be sensitive to themes which could frighten a younger child, will not depict realistic scenes of violence which minimize or gloss over the effects of violent acts. Other Content Guidelines: There may be some inoffensive slang, no profanity and no nudity. |
| **C8+** | **Children 8 and older**. Programming generally considered acceptable for children 8 years and over to watch on their own. Violence Guidelines: Violence will not be portrayed as the preferred, acceptable, or only way to resolve conflict or encourage children to imitate dangerous acts which they may see on television. Any realistic depictions of violence will be infrequent, discreet, of low intensity and will show the consequences of the acts. Other Content Guidelines: There will be no profanity, nudity or sexual content. |
| **C** | **Children**. Programming intended for children under age 8. Violence Guidelines: Careful attention is paid to themes which could threaten children's sense of security and well being. There will be no realistic scenes of violence. Depictions of aggressive behavior will be infrequent and limited to portrayals that are clearly imaginary, comedic or unrealistic in nature. Other Content Guidelines: There will be no offensive language, nudity or sexual content. |

| Rating | Canadian French Description and Content Themes for Age-Based Ratings |
|---|---|
| **18+** | **Adults**. Programming is for adults only. This program contains sustained violence or extremely violent scenes. |
| **16+** | **Viewers 16 and over**. Programming is not suitable for those under age 16. This program contains frequent scenes of violence or intensely violent scenes. |
| **13+** | **Viewers 13 and over**. Programming may not be suitable for children under the age of 13. This program either contains several violent scenes or one or more scenes that are violent enough to affect them. Viewing in the company of an adult is therefore strongly recommended for children under the age of 13. |
| **8+** | **Viewers 8 and over**. Not recommended for young children. This program is suitable for most audiences, but it contains mild or occasional violence that could upset young children. Viewing in the company of an adult is therefore recommended for young children (under the age of 8) who do not distinguish between reality and imagination. |
| **C8+** | **Children 8 and older**. Programming generally considered acceptable for children 8 years and over to watch on their own. Violence Guidelines: Violence will not be portrayed as the preferred, acceptable, or only way to resolve conflict or encourage children to imitate dangerous acts which they may see on television. Any realistic depictions of violence will be infrequent, discreet, of low intensity and will show the consequences of the acts. Other Content Guidelines: There will be no profanity, nudity or sexual content. |
| **G** | **General Audience**. This program is suitable for audiences of all ages. It contains no violence, or any violence that it does contain is either minimal or is presented in a humorous manner, as a caricature, or in an unrealistic way. |

## Blocking Canadian V-Chip Ratings




If you receive Canadian programs you can block Canadian English and French V-Chip by ratings only. When you block a particular rating, you automatically block the higher rated programs as well. To block Canadian English and French program ratings:

1. Select **Canada V-Chip** from the **Parental Control** menu.
2. Select **English** ratings or **French** ratings.
3. Determine the rating you want to block.
4. Press the DOWN ARROW button to scroll to the rating you want to change.
5. Press the SELECT/OK button to change its status to block (the lock icon appears and all ratings above the one you selected change to lock).

## Lock/Unlock Parental Controls

Selecting this option lets you lock and unlock **Parental Controls** settings using a password.

If you do not lock **Parental Controls**, none of the settings for **V-Chip Block Features** or **Front Panel Block** will take effect.

**Note**: If you forget your password, press the MENU button, then select **Parental Control** (the password entry screen displays). Simultaneously press and hold the CH+ and VOL+ on the television for three seconds. **Parental Controls** unlock and the **Parental Controls** menu displays so you can enter a new password.

### Front Panel Block

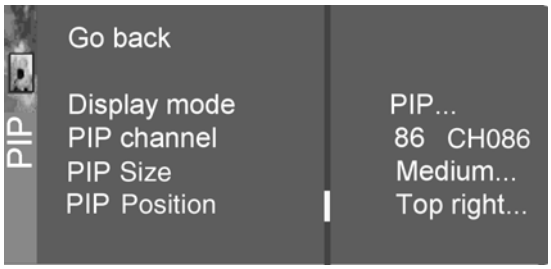
Selecting this option lets you block (disable) or unblock (enable) the TV's front panel. The remote will still control the monitor. When using this as a **Parental Control** method, remove access to any remote that is capable of operating the television while you have the front panel blocked.

Don't forget to lock **Parental Controls** after you change the status. If you don't, the front panel block will not take effect.

## PIP Menu

The **PIP** menu allows you to change your **PIP** settings. To open the **PIP** menu, press MENU and then select **PIP**.

**Note**: PIP through the monitor is not supported on DISH DVI, CMP1, and CMP2. However, your DISH DVI-equipped DISH Network receiver may have PIP capabilities which will allow PIP on the DISH DVI input. See your User's Guide for your satellite receiver.




**Tip: Remember to keep the remote control in TV mode to use these buttons.**

### Display Mode

Use the LEFT and RIGHT ARROWS to choose the **Display Mode**:

- **Off** - No window is displayed.
- **PIP** - The PIP window is displayed.
- **POP** - The POP window is displayed.

**Tip: You can also change the PIP window's position without having to use menus by pressing the POSITION button on the remote control.**

### PIP Channel

Use the LEFT and RIGHT ARROWS to choose the channel displayed in the **PIP** or main **POP** window. Scroll through channel list as well as the **VID1**, **VID2** and **FRNT** input channels.

### PIP Size

Use the LEFT and RIGHT ARROWS to choose having a **Small**, **Medium** or **Large PIP** window.

**Note**: PIP size is not available for POP.

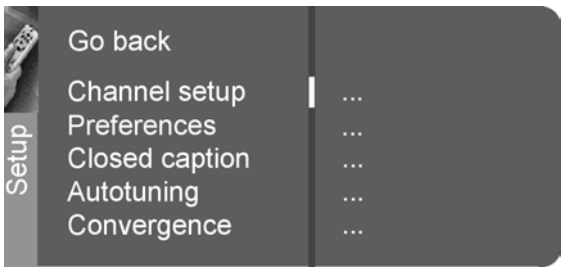
### PIP Position

Use the LEFT and RIGHT ARROWS to choose having the **PIP** window in the top right, top left, bottom right, or bottom left part of the monitor screen.

**Note**: PIP position is not available for POP.

## Setup Menu

The **Setup** menu allows you to customize the way you use your monitor. To open the **Setup** menu, press MENU and then select **Setup**.




### Channel Setup

- **Signal Type** - Choose signal type for the monitor's internal tuner. Choose **Cable** if you are using cable or a cable box for TV signals. Choose **UHF/VHF** Antenna if you are using an off-air antenna for TV signals. Use the LEFT and RIGHT ARROWS to choose the **Signal Type**.

  **Note**: For the best viewing experience, you should use the off-air tuner provided in your DISH DVI-equipped DISH Network satellite receiver. The satellite receiver's off-air tuner can receive both analog and digital off-air broadcasts, will integrate off-air programming into its Electronic Program Guide, and allows all of the satellite and off-air programming to be viewed over a single high-quality digital connection.

- **Auto Channel Search -** Searches for channels from the signal that the monitor's off-air tuner is receiving and puts them in the channel list. Press SELECT/OK to search for channels.

- **Auto Channel Update -** Searches for any new channels on the monitor's internal off-air tuner that are not in your channel list and adds them to the list. Press SELECT/OK to update the channel list.

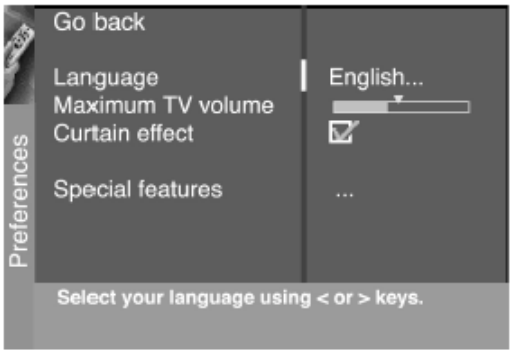
  **Note**: The **ANTENNA/CABLE** connection is capped.

- **List and Labels -** Edit the channels in the list or choose labels for each channel.

  - **Standard Labels** - Use the LEFT and RIGHT ARROWS to select from a list of standard labels, such as **NBC**, **NICK**, and **TBS**. The DVI input is labelled **DISH**.

- **Custom Labels** - If you want to use different labels than what is in the standard list, you can make your own custom labels.
  - 1 button - Cycle up through the alphabet, numbers, and other characters.
  - 2 button - Cycle down through the alphabet, numbers, and other characters.
  - LEFT ARROW - Backspace.
  - RIGHT ARROW - Add a blank space.

## Preferences




**Tip: Remember to keep the remote control in TV mode to use these buttons.**

- **Language** - Use the LEFT and RIGHT ARROWS to select your preferred language for the menus: **English**, **Spanish**, or **French**.

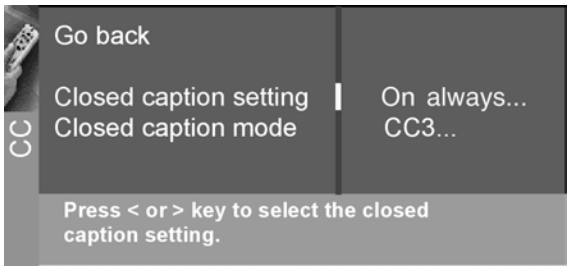
- **Maximum Volume** - Allow you to set how high volume turns up when you press the VOL+ button. Highlight **Maximum Volume**, then press and hold SELECT/OK to hear the maximum volume. Use the LEFT and RIGHT ARROWS to set the maximum volume. Make sure the volume has not been muted or turned all the way down.

- **Curtain Effect** - Reveals the picture by "opening" it from the middle of the screen when the TV is switched on. Hides the picture by "closing" it from the sides when the TV is switched off. This feature is not available for HD (**DISH DVI** or **CMP** inputs).

- **Special Features** - Use the SELECT/OK to open the **Special Features** menu. **Auto on** switches your TV on after a power outage; **Auto channel** tunes the TV to the channel you specify as the **Initial channel** when **Auto on** is enabled; **Auto volume** tunes the TV to the volume you set in **Initial volume** when **Auto on** is enabled.

## Closed Caption

Many programs are encoded with closed-captioning information, which lets you display the audio portion of a program as text on the monitor's screen.




Closed captioning is not available on all channels at all times. Only specific programs encoded with closed-captioning information are applicable. When a program is closed captioned, **CC** is displayed in the channel banner.

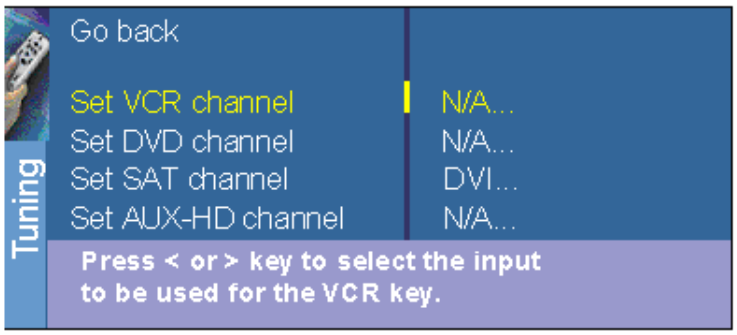
**Note**: Your DISH Network satellite receiver includes closed captioning features. See your *User's Guide* for details.

**Note**: Closed captioning is not available when using **DISH DVI** or **CMP** inputs.

The closed caption options are:

- **Closed Caption setting** - Use the LEFT and RIGHT ARROWS to choose the way closed captioning information is shown on the screen. Closed captioning is available only on the **ANTENNA/CABLE** connection (capped).
  - **Off** - No captioning information displayed.
  - **On always** - Captioning information shown always, when available.
  - **On when mute** - Displays captioning information, when available, whenever the monitor's sound is muted by pressing the MUTE button. The captioning information is not displayed when the sound is not muted.
- **Closed Caption Mode** - Displays a choice list that lets you choose which captioning mode is used for displaying captioning information. If you are unsure of the differences among the modes, you may prefer to leave the closed captioned mode set to **CC1**, which displays complete text of the program in the primary language in your area.

## Autotuning




**Note**: The SAT mode button has been preset to automatically switch to the **DISH DVI** input.

The **Autotuning** menu displays a choice list that lets you set up the monitor to automatically tune to the correct input channel when you press a mode button on the remote.

1. Press MENU to display the **Main Menu**.
2. Highlight **Setup** and press SELECT/OK.
3. Highlight **Autotuning** and press SELECT/OK.
4. Choose which channel you would like to set.

   **Note**: The mode buttons on your DISH Network remote control correspond to the **Autotuning** channels as follows:

   - The SAT mode button switches to the input assigned to the **SAT** channel, which by default is the **DVI** input.
   - The VCR mode button switches to the input assigned to the **VCR** channel.
   - The AUX mode button switches to the input assigned to the **DVD** channel.
   - The **AUX-HD** channel is currently unused.

5. Press the RIGHT ARROW button to select the choice that matches the way you have the device connected to the monitor and press SELECT/OK.

   The choices and brief explanations follow:

   **N/A** - Choose this if you don't have this particular device connected to the monitor, or if you don't want the monitor to automatically tune to the correct channel when you're using this device.

   **Channel 3** or **4** - The device is connected to the **CABLE/ANTENNA** jack on the back of the monitor, and you want the monitor to tune to channel 3 when you press the corresponding button on the remote. Reminder: make sure the device's CHANNEL 3/4 switch is set to channel 3.

   **VID1** or **VID2** - The device is connected to a **VIDEO** or **S-VIDEO** jack on the back of the monitor and you want the monitor to tune to a **VIDEO** input channel when you press the corresponding button.

**Tip: Normally, you would want to use the remote control in SAT mode to watch DISH Network programming and to use the extensive features of your DISH Network satellite receiver.**

**Tip: Remember to keep the remote control in TV mode to use these buttons.**

**FRNT** - The device is connected to the **VIDEO** jack on the front of the monitor and you want the monitor to tune to the front **VIDEO** input channel (**FRNT**) when you press the corresponding button.

**CMP1** or **CMP2** - The device is connected to the **CMP1** or **CMP2** component jacks on the back of the monitor an you want the monitor to tune to a component input channel when you press the corresponding button.

**DVI** - A DISH DVI-equipped DISH Network satellite receiver is connected to the **DISH DVI** input on the back of the monitor and you want the monitor to tune to the **DISH DVI** channel when you press the corresponding button.

## Convergence (Projection Models Only)

### Auto Convergence

**Auto Convergence** automatically adjusts the monitor's tubes to make a clear picture on the screen. You should perform auto convergence when you install, move or rotate your monitor. For best results, make sure the monitor has been on for about an hour when you perform the auto-convergence procedure.

There are two adjustments made when you use auto convergence:

- **Red convergence** displays the **Red** convergence screen, allowing you to use the arrow buttons to align the red and green images.
- **Blue convergence** displays the **Blue** convergence screen, allowing you to use the arrow buttons to align the blue and green images.

Your monitor's picture tubes might have been disturbed during delivery or after you moved the monitor, causing the color in your monitor to be out of alignment. The colors adjust by starting auto convergence.

**Note**: To converge the monitor's DISH DVI picture, you must have the monitor switched to the DISH DVI input during convergence. To converge on standard definition inputs, repeat auto convergence on one of those inputs.

1. Press MENU and select **Convergence**.
2. Select **Auto Convergence**.
3. When the auto convergence is complete, the **Red Center Convergence** screen appears. The cross in the middle of the screen should be completely yellow. If it is not, use the ARROW buttons to move the red cross to overlap the green cross. Press SELECT/OK when the cross is completely yellow.
4. The **Blue Center Convergence** screen appears with a completely cyan (blue-green) cross in the middle of the screen. If it is not, use the ARROW buttons to move the blue cross to overlap the green cross. Press SELECT/OK when the cross is completely cyan (the monitor tunes to the last available channel in the channel list).

### Manual Convergence

Manual convergence let you adjust the monitor's tubes to make a clear picture on the screen. For best results, make sure the monitor has been on for about an hour when you perform the manual convergence procedure.

**Note**: This type of **Convergence** is available only on some models.

1. Press MENU and select **Convergence**.
2. Select one of the following:
    - Select **Red Convergence**. The cross in the middle of the screen should be completely yellow. If it is not, use the ARROW buttons to move the red cross to overlap the green cross. Press SELECT/OK when the cross is completely yellow.
    - Select **Blue Convergence**. The cross in the middle of the screen should be completely cyan (blue-green). If it is not, use the ARROW buttons to move the blue cross to overlap the green cross. Press SELECT/OK when the cross is completely cyan.

## Input Banner

There are several indicators that might appear when you press the INFO button on the remote. This display is called the **Input Banner**. The following list describes the items on the **Input Banner** screen.

- Displays the current input channel and label assigned to the channel.
- Displays the current time.
- **Lock** - Displayed when the Parental Controls are locked.
- **Mute** - Displayed when you mute the sound.
- **4/3 Format** - Displays the current screen format.
- **Mono** (or **Stereo**) - Mono displayed when the current channel is broadcasting in mono. Stereo displayed when the current channel is broadcasting in stereo.
- **SAP** - Displayed when the current channel is broadcasting SAP (Second Audio Program) information.
- **CC** - Displayed when Closed Captioning is available on the current channel.

**Tip: Remember to keep the remote control in TV mode to use these buttons.**

**Notes**

# Chapter 4

# Installation and Setup

## Installation Considerations

### Protect Against Power Surges

- Connect all components before you plug any of their power cords into the wall outlet.
- Turn off the monitor and/or component before you connect or disconnect any cables.
- Make sure all antennas and cables are properly grounded. Refer to the *Safety Instructions* on page iii.
- To protect audio amplifiers of the monitor or connected audio equipment, ensure the volume is turned down before powering up the system.

### Protect Components from Overheating

- Don't block ventilation holes on any of the components. Arrange the components so that air can circulate freely.
- Don't stack components.
- When you place components in a stand, make sure you allow adequate ventilation.
- If you connect an audio receiver or amplifier, place it on the top shelf so the heated air from it won't flow around other components.

### Position Cable Properly to Avoid Audio Interference

- Insert each cable firmly into the designated jack.
- If you place components above the monitor, route all cables down the side of the back of the monitor instead of straight down the middle of the monitor.
- If your antenna uses 300-ohm twin lead antenna cables, do not coil the cables. Also, keep the twin lead cables away from audio/video cables.

### Important Stand and Base Safety Information

Choose the location for your monitor carefully. Place the monitor on a stand or base that is of adequate size and strength to prevent the monitor from being accidentally tipped over, pushed off, or pulled off. This could cause personal injury and/or damage the monitor. Refer to the *Safety Instructions*.

### Use Indirect Light

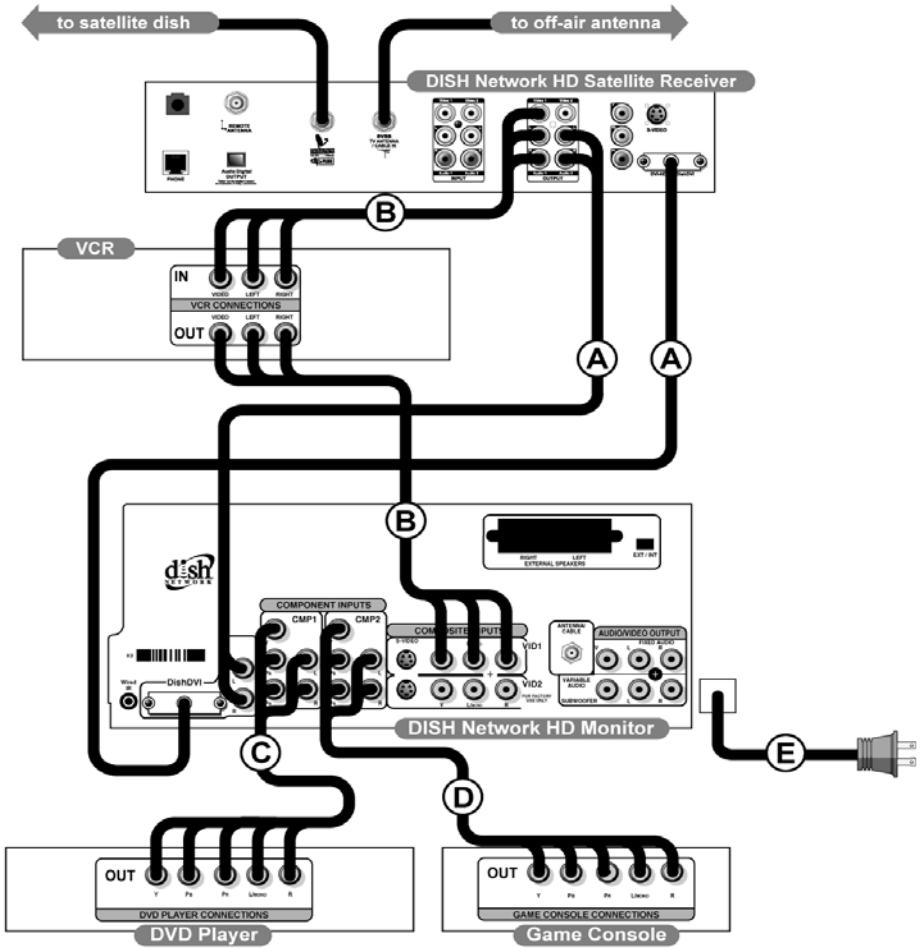
Don't place the monitor where sunlight or room lighting will be directed toward the screen. Use soft or indirect lighting.

### Magnet Warning

Don't place large speakers or subwoofer close to the monitor or the picture can become permanently distorted.

## Connecting Your HDTV Monitor

Use the diagram below and the following instructions to connect your DISH Network HD monitor to your DISH Network satellite receiver and other optional devices. This is the recommended installation for best results, though other installations are also supported.



## Ⓐ Connect Your DISH Network Satellite Receiver

1. Connect a DVI cable between the monitor and DISH Network satellite receiver **DISH DVI** connectors.
2. Connect red and white RCA-type cables between the matching color RCA-type plugs on the monitor audio inputs and DISH Network satellite receiver audio outputs.

## Ⓑ Connect a VCR (Optional)

Follow these instructions to connect the monitor to a VCR. See your VCR User's Guide for VCR setup instructions.

1. Connect yellow, white, and red RCA-type cables between the matching color RCA-type plugs at **VID1** or **VID2** inputs on the monitor and the VCR outputs.
2. Connect yellow, white, and red RCA-type cables between the matching color RCA-type plugs at the inputs on the VCR and the satellite TV receiver outputs.

   **Note**: Optionally, instead of connecting video using yellow RCA-type connections, connect an S-Video cable at the input on the VCR and satellite TV receiver output.

## Ⓒ Ⓓ Connect a DVD Player and/or Game Console (Optional)

Follow these instructions to connect the monitor to a DVD player or other device. See your DVD player or other device User's Guide for setup instructions.

1. Connect green, blue, and red **Y-$P_B$-$P_R$** cables between the matching color connections at **CMP1** or **CMP2** inputs on the monitor and outputs on a DVD player or other device.
2. Connect white and red RCA-type cables between the matching color RCA-type plugs at **CMP1** or **CMP2** inputs on the monitor and the outputs on a DVD player or other device.

## Ⓔ Plug In Your Monitor to a Power Outlet

## Auto Convergence (Projection TV Models Only)

Your monitor's picture tubes might have been disturbed during delivery or after you moved the monitor, causing the color in your monitor to be out of alignment. The colors can be adjusted by starting auto convergence.

**Note**: Auto Convergence is available only on projection TV models.

**Note**: To converge the monitor's DISH DVI picture, you must have the monitor switched to the DISH DVI input during convergence. To converge on standard definition inputs, repeat auto convergence on one of those inputs.

After you have installed and connected your monitor, turn on your monitor and satellite receiver using the SAT button on the remote control. Leave the monitor on for about one hour and then complete the auto convergence steps below while on the **DISH DVI** input.

1. Press SAT to switch the monitor display to the **DISH DVI** input.
2. Press TV to put the remote control in TV mode.
3. Press MENU and select **Convergence**.
4. Select **Auto Convergence**.
5. When the auto convergence is complete, the **Red** center convergence menu appears. The cross in the middle of the screen should be completely yellow. If it is not, use the ARROW buttons to move the red cross to overlap the green cross. Press SELECT/OK when the cross is completely yellow.
6. The **Blue** center convergence menu appears with a completely cyan (blue-green) cross in the middle of the screen. If it is not, use the ARROW buttons to move the blue cross to overlap the green cross. Press SELECT/OK when the cross is completely cyan (the monitor tunes to the last available channel in the channel list).

## Restoring Your Remote Control's Factory Settings for Monitor Control

Your remote control provided with your DISH DVI-equipped DISH Network satellite receiver comes from the factory ready to work with your DISH Network HDTV monitor. However, the TV mode button can be programmed to operate other TVs. If the remote control has been programmed to operate a different TV, you can restore the remote control factory settings to control your DISH Network HDTV monitor by performing the following:

1. Press and hold the TV button until all four mode buttons light. Release the button.

2. Use the NUMBER PAD buttons to enter 7-4-2.

3. Press the POUND (#) button. If you entered the code correctly, the TV mode button will flash three times.

4. Press the SAT button and the monitor should turn on. If it doesn't turn on, repeat steps 1 through 4.

# Chapter 5

# Troubleshooting

Use these tables if you have problems using the system *before* calling the Customer Service Center. Many problems arise from misunderstandings of how the system works, especially when you are just becoming familiar with it. These tables cover many problems, usually with a simple solution for each one. To solve a particular problem, do the following:

1. Review the section in this *Guide* that relates to the problem.
2. If you cannot find a solution, then find the section in the following tables that relates to the problem.
    - Read the *What's Happening* column until you find the problem.
    - Try each of the suggested solutions in the *What to Do* column.
3. If the problem cannot be solved using the above steps, call the Customer Service Center at 1-800-333-DISH (3474).

# Troubleshooting Tables

## Monitor

| What is Happening | What to Do |
|---|---|
| Monitor won't turn on. | • Press the TV power button.<br>• Make sure the monitor is plugged in.<br>• Check the wall receptacle (or extension cord) to make sure it is "live" by plugging in something else.<br>• Something might be wrong with your remote control. Press the POWER button on the front of the monitor. If the monitor turns on, check and replace the remote control batteries.<br>• The front panel controls may be locked (disabled). Use the remote control to unlock the front panel controls by selecting the Front Panel Block in the Parental Control menu and press OK to uncheck the box. |
| Can't get to DISH Network programming. | • Make sure your monitor is on.<br>• Monitor set for the wrong input. Press the SAT button on the remote control.<br>• Make sure the satellite receiver is on.<br>• Check your DISH DVI cable connections. |
| Remote won't control the monitor. | • Remote control may need to be reprogrammed. See the instructions on page 38.<br>• Make sure the remote control is in TV mode.<br>• Check and replace the remote control batteries. |
| Front panel buttons don't work. | • The front panel controls may be locked (disabled). Use the remote control to unlock the front panel controls by selecting the Front Panel Block in the Parental Control menu and press OK to uncheck the box.<br>• Unplug the monitor for two minutes and then plug it back in. Turn the monitor on and try again. |
| Monitor turns off while playing. | • Sleep timer may have been activated. Go to page 20 for instructions.<br>• Electronic protection circuit may have been activated because of a power surge. Wait 30 seconds and then turn on again. If this happens frequently, the voltage in your house may be abnormally high or low.<br>• Unplug. Wait five minutes. Plug in again. |
| Monitor turns on unexpectedly. | • Wake up timer might have been activated. Go to page 20 for instructions.<br>• Auto On might have been activated by a power interruption. Go to page 29 for instructions.<br>• You might have pressed a button on the remote control accidentally. |
| Blank screen. | • Make sure the monitor is turned on.<br>• Make sure the component connected to the monitor is turned on.<br>• Try another channel or input |
| No sound, picture OK. | • Maybe the sound is muted. Try pressing the volume up button to restore sound.<br>• If using S-Video or Y-$P_B$-$P_R$ connections, remember to also connect the component's left and right audio output jacks to the monitor's L/MONO and R Audio Input jacks.<br>• Make sure the INT/EXT switch on the back of the monitor is put on "INT".<br>• The sound settings may not be set correctly. Go to page 14 for more information.<br>• Check the cable connectors. |
| Monitor will not turn on when SAT button is pressed. | • Check **Autotune** menu to ensure that SAT/Cable is assigned to the DVI input. |
| Can't select certain channels or inputs. | • Channel may be blocked or not approved in the Parental Controls menu.<br>• If using a VCR, check to make sure the TV/VCR button on the VCR is in the correct mode (press the TV/VCR button on your VCR). |
| Noisy stereo reception. | • May be a weak station. Use **Sound** menu to choose mono sound. |
| No picture, no sound, but monitor is on. | • Maybe the cable/air function is set to the wrong position.<br>• The channel or input might be blank — change channels or inputs.<br>• If you're watching your VCR and it's connected with coaxial cable to the CABLE/ANTENNA jack, tune the monitor to channel 3 or 4 (whichever channel is selected on the 3/4 switch on the back of your VCR). Also check to make sure the TV/VCR button on the VCR is in the correct mode (press the TV/VCR button on your VCR).<br>• Check cable connections.<br>• Make sure the component connected to the monitor is turned on. |

| What is Happening | What to Do |
|---|---|
| Sound OK, but the picture is poor. | • Check antenna connections. Make sure all of the cables are firmly connected to the jacks.<br>• Try adjusting sharpness function to improve weak signals. |
| Volume buttons not adjusting volume louder. | • Check to make sure volume isn't limited by the maximum volume feature. |
| Picture not moving. | • You have activated the Freeze feature by pressing SELECT/OK on the remote. Press any button to "unfreeze" the picture.<br>• Check whether the pause feature on your DISH Player-DVR or VCR is activated. |
| Black box appears on the screen. | • Closed-captioning might be enabled on either your monitor or your satellite receiver. Check Closed Caption in the Setup menu. Go to page 30 for more instructions. Check your satellite receiver's User's Guide. |
| Closed caption is not working | • Closed caption is available only on 480i inputs through the monitor. Check your User's Guide for you DISH Network satellite receiver for details. |
| Freeze button not working. | • The freeze feature is not available for Component video (CMP1 or CMP2) or DISH DVI inputs. |

## V-Chip/Parental Controls

| What is Happening | What to Do |
|---|---|
| Ratings limits don't work. | • You must lock the settings. Go to the MAIN MENU (press MENU on your remote), select Parental Control, select Lock Parental Controls.<br>• The V-Chip Parental Control is not available for DISH DVI, CMP1, or CMP2 inputs. Your DISH DVI-equipped DISH Network satellite receiver provides parental controls for the DISH DVI input. See the User's Guide that came with your satellite receiver. |
| Password lost or forgotten. | • If you forget your password, press MENU, then select Parental Control (the password entry screen appears). Simultaneously press and hold CH+ and VOL+ on the monitor's front panel for 3 seconds. The Parental control menu appears on the screen, and you can re-enter a password via Lock Parental Controls. |
| V-Chip blocks non-violent programs. | • Maybe the movie was given an NR (Not Rated) status. After you block movie ratings, you must set NR to View separately in order to view movies with an NR rating. |

**Notes**

# Appendix

## Limited Warranty

This Limited Warranty is a legal document. Keep it in a safe place. Remember to retain your original purchase receipt for warranty service! Any items returned without a copy of the original purchase receipt will be considered out of warranty.

### What the Warranty Covers

This warranty extends only to the original user of this DISH Network Monitor. EchoStar Technologies Corporation ("EchoStar") warrants this DISH Network Monitor against defects in materials or workmanship as follows:

LABOR: For a period of one (1) year from the original date of purchase, if EchoStar determines in its sole judgment that the DISH Network Monitor is defective subject to the limitations of this warranty, EchoStar will arrange to pay an Authorized Service Center for DISH Network Monitors for the labor charges to repair your DISH Network Monitor. EchoStar warrants any such work done against defects in materials or workmanship for the remaining portion of the original warranty period.

PARTS: For a period of one (1) year from the original date of purchase, if EchoStar determines in its sole judgment that any part of a DISH Network Monitor is defective subject to the limitations of this warranty, EchoStar will arrange to pay an Authorized Service Center for DISH Network Monitors to supply new or re-manufactured parts in exchange for parts determined by EchoStar in its sole judgment to be defective subject to the limitations of this warranty. If applicable, for a period of two (2) years from the original date of purchase, if EchoStar determines in its sole judgment that the picture tube in the DISH Network Monitor is defective subject to the limitations of this warranty, EchoStar will arrange to pay an Authorized Service Center for DISH Network Monitors to supply a new picture tube. EchoStar warrants any such replacement parts against defects in materials or workmanship for the remaining part of the original warranty period. Note: "parts" means items included in this package. It does not include other parts purchased separately.

### For Service

- Call 1-800-333-DISH (3474) and have your unit's date of purchase and model number ready.
- A Customer Service Representative will assist you.
- If the Representative determines that you should receive service, they will provide you with the name(s) of an Authorized Service Center for DISH Network Monitors.
- Contact the Service Center and arrange for pick up, repair, and return service, provided that your unit is located within the geographic territory covered by the Authorized Service Center for DISH Network Monitors. If not, you must take your unit to the Authorized Service Center for DISH Network Monitors location at your own expense, or pay for the cost the Authorized Service Center for DISH Network Monitors may charge to transport your unit to and from your home.
- The original purchase receipt which is evidence that the product is within the warranty period must be presented to obtain warranty service.

## What the Warranty Does Not Cover

- This warranty *does not cover* customer instruction. (Your Owner's Manual describes how to install, adjust, and operate your unit. Any additional information should be obtained from your retailer.)
- This warranty *does not cover* installation and related adjustments. If applicable, such installation will be warranted under a separately purchased installation agreement.
- This warranty *does not cover* physical setup or adjustment of any consumer electronic devices, remote control batteries, loss of use of the DISH Network Monitor, or unused programming charges due to malfunction.
- This warranty *does not cover* signal reception problems.
- This warranty does not cover cosmetic damage, damage due to lightning, electrical or telephone line surges, fire, flood, or other acts of Nature, accident, misuse, abuse, repair or alteration by other than an Authorized Service Center for DISH Network Monitors, use of accessories not included in this package, negligence, commercial or institutional use, or improper or neglected maintenance.
- This warranty *does not cover* batteries.
- This warranty *does not cover* damage from images burnt onto the screen.
- This warranty does not cover a unit that has been modified or incorporated into other products.
- This warranty *does not cover* a unit purchased, serviced or operated outside the continental United States of America.
- This warranty *does not cover* problems which do not involve defective materials or workmanship. Costs of such service calls are the sole responsibility of the user.
- This warranty *does not cover* equipment sold AS IS or WITH ALL FAULTS.
- This warranty *does not cover* shipping damage.

## Legal Limitations

REPLACEMENT AND/OR REPAIR AS PROVIDED UNDER THIS WARRANTY IS YOUR EXCLUSIVE REMEDY. ECHOSTAR SHALL NOT BE HELD LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESSED OR IMPLIED WARRANTY ON THIS DISH NETWORK MONITOR, NOR FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF, OR INABILITY TO USE, THIS DISH NETWORK MONITOR. UNDER NO CIRCUMSTANCES SHALL ECHOSTAR'S LIABILITY, IF ANY, EXCEED THE PURCHASE PRICE PAID FOR THIS DISH NETWORK MONITOR. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS SYSTEM IS LIMITED IN DURATION TO THE PERIOD OF THIS WARRANTY. ECHOSTAR RESERVES THE RIGHT TO REFUSE TO HONOR THIS WARRANTY IF ECHOSTAR DETERMINES ANY OF THE ABOVE EXCEPTIONS HAVE CAUSED THIS DISH NETWORK MONITOR NOT TO HAVE PERFORMED PROPERLY. THIS WARRANTY SHALL BE VOID IF ANY FACTORY-APPLIED IDENTIFICATION MARK, INCLUDING BUT NOT LIMITED TO SERIAL NUMBERS, HAS BEEN ALTERED OR REMOVED. THIS WARRANTY SHALL ALSO BE VOID IF THIS DISH NETWORK MONITOR HAS BEEN OPENED BY AN UNAUTHORIZED PERSON.

### How State Law Relates to this Warranty

Some states do not allow the exclusion nor limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you also may have other rights that vary from state to state.

## FCC Compliance

The following text is extracted from Federal Communications Commission (FCC) regulations, as of the publication date of this Guide. Contact the FCC (see following) or your library for the complete text of the regulations.

### Radio Interference

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- this device may not cause harmful interference, and
- this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- Refer to Troubleshooting in Chapter 5 for a detailed description of recommended customer actions.
- If none of the above remedies stops the radio interference, you should contact a licensed radio/television technician, your satellite dealer, or call the Customer Service Center at 1-800-333-3474, for assistance.

## Equipment Modifications

There are no customer repairable parts inside. Any attempts to open or repair the Monitor will void your warranty. There is risk of electrical shock, which may result in damage to the equipment, or personal injury or death.

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**Notes**

**Notes**

**Notes**

**Notes**

Write the following information in the spaces provided below. You may need to provide this information if you call the Customer Service Center.

| | |
|---|---|
| Purchase Location Name: | |
| Purchase Location Telephone Number: | |
| Monitor Serial Number: | |